

Amendments to the Drawings:

The attached sheet of drawings includes changes to Figure 3. This sheets, which includes Figure 3, replaces the original sheet including Figure 3.

Appendix A: Replacement Sheet

Appendix B: Annotated Sheet Showing Changes

REMARKS

Independent claim 14 with dependent claims 16-27 remain present in the application.

Claims 14 and 16-18 remain rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. 1,707,375 (Upson) for the reasons given in the Office Action of January 27, 2003. Claims 14 and 16-18 remain rejected under 35 U.S.C. § 103 as being unpatentable over the Upson reference in view of Applicants' admitted prior art and/or *Modern Pulp and Paper Making*, by Calkin for the reasons given in the Office Action of January 27, 2003. Claims 14 and 16-27 remain rejected under 35 U.S.C. § 103 as being unpatentable over Applicants' admitted prior art in view of the Upson reference and U.S. 2,881,670 (Thomas) and/or U.S. 2,881,676 (Thomas) as necessary, and U.S. 3,929,065 (Csordas et al.) and U.S. 3,595,744 (Skoldkvist) and Calkin as further necessary for the reasons given in the Office Action of January 27, 2003. The arguments provided in Applicant's Response filed June 26, 2003 were "deemed unpersuasive of patentability" on the basis that the limitation added in such response "is a statement of intended function or method of operation and thus does not impart further positive apparatus structure.

Claim 14 was amended in response to the Office Action of January 27, 2003 to recite that the first wedge zone, formed by the first top wire and the bottom wire, is pressure loaded at the outlet end. In a response filed December 9, 2003 to the Office Action of October 9, 2003, the Applicant submitted that such recitation is not "a statement of intended function or method of operation" but is in fact a further apparatus limitation on the first wedge zone.

The Applicant cited MPEP § 2173.01 for the proposition that

A fundamental principle contained in 35 U.S.C. 112, second paragraph is that applicants are their own lexicographers. They can define in the claims what they regard as their invention essentially in whatever terms they choose so long as the terms are not used in ways that are contrary to accepted

meanings in the art. Applicant may use functional language, alternative expressions, negative limitations, or any style of expression or format of claim which makes clear the boundaries of the subject matter for which protection is sought. As noted by the court in *In re Swinehart*, 439 F.2d 210, 160 USPQ 226 (CCPA 1971), a claim may not be rejected solely because of the type of language used to define the subject matter for which patent protection is sought. (emphasis added)

The Applicant also cited MPEP § 2173.05(g) for the proposition that

A functional limitation is an attempt to define something by what it does, rather than by what it is (e.g., as evidenced by its specific structure or specific ingredients). There is nothing inherently wrong with defining some part of an invention in functional terms. Functional language does not, in and of itself, render a claim improper. *In re Swinehart*, 439 F.2d 210, 169 USPQ 226 (CCPA 1971).

A functional limitation must be evaluated and considered, just like any other limitation of the claim, for what it fairly conveys to a person of ordinary skill in the pertinent art in the context in which it is used. A functional limitation is often used in association with an element, ingredient, or step of a process to define a particular capability or purpose that is served by the recited element, ingredient or step. Whether or not the functional limitation complies with 35 U.S.C. 112, second paragraph is a different issue from whether the limitation is properly supported under 35 U.S.C. 112, first paragraph or is distinguished over the prior art. (emphasis added)

In other words, the Applicant showed that functional terms in an apparatus claim:

- 1) do not render the claim improper **and**
- 2) “must be evaluated and considered, just like any other limitation of the claim”.

The Advisory Action of December 30, 2003 acknowledges that reciting “the first wedge zone being pressure loaded at the outlet end” does not render such claim improper. However, at no time during the prosecution of this application has such language been “evaluated and considered, just like any other limitation of the claim”. Accordingly, the rejection of record remains improper and the patentability of the claim must be reconsidered in view of this limitation.

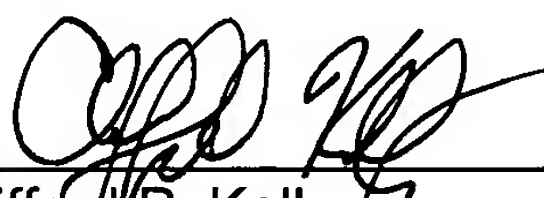
In the interest of obtaining allowance, claim 1 has been amended to recite that the device includes "apparatus for pressure loading the outlet end of the first wedge zone." Figure 3 has been amended to include reference numeral 30 and a lead line from such reference numeral to the apparatus for pressure loading the first wedge zone outlet end. The specification has been amended to recite that "wedge zone 17 can be pressure loaded by the pressure loading apparatus 30." Since the apparatus has always been shown in Figure 3, these amendments do not constitute new matter.

As shown in the Applicant's response to the Office Action of January 27, 2003, in a fiberboard making device including a wedge having a pressure loaded outlet end, "the maximum dry content can be obtained after pre-dewatering, regardless of the board thickness to be produced and thus, the web undergoes optimum preparation for the subsequent press zone." (Page 6, lines 8-13) With the pressure loading of the present invention, the gap width is allowed to vary so as to maintain a substantially constant pressure. The constant pressure at the outlet end of the wedge zone produces a consistently dry output product in spite of fluctuations in the consistency and ratio of pulp-to-water of the slurry introduced into the wedge. While the width of the gap in the wedge zone of the Upson device is adjustable (page 1, lines 91-98), the screw (7) utilized to adjust the gap provides a fixed gap width at any specific point of adjustment, which will in turn produce a variable pressure depending on the consistency of the pulp slurry. Thomas '676 similarly discloses a wedge zone having an outlet end where the gap may be adjusted (Col. 2, lines 41-45; Col. 4, lines 50-53) to provide a fixed gap width at any specific point of adjustment. The Csordas reference also discloses a wedge zone having an outlet end where the gap may be adjusted (Col. 2, lines 37-50) to provide a fixed gap width at any specific point of adjustment. None of the references teach or suggest the wedge zone having a pressure loaded outlet end recited in claim 14. Accordingly, the rejection of claim 14 should be withdrawn.

In view of the proceeding remarks, prompt and favorable reconsideration is respectfully requested.

Respectfully submitted,

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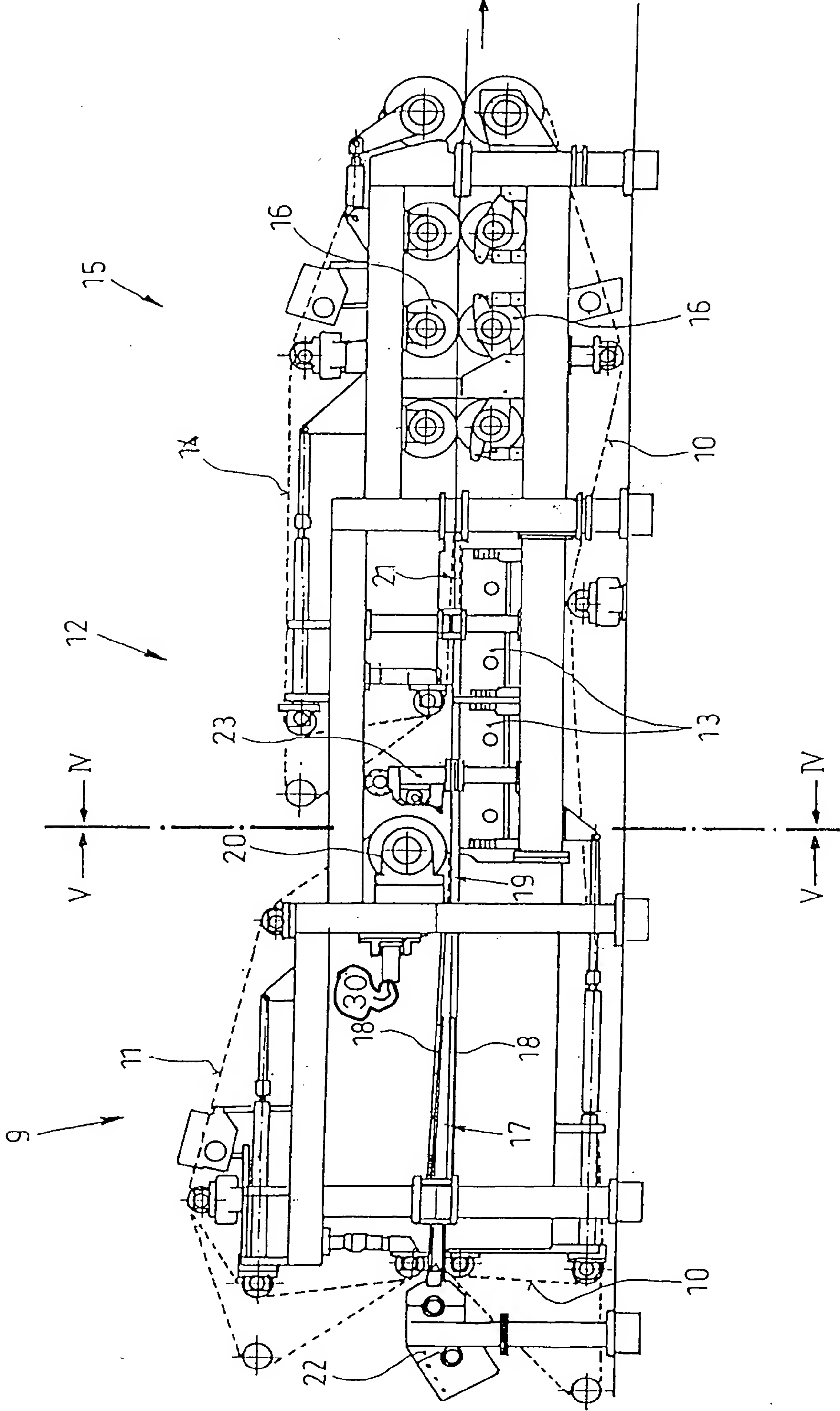


Fig. 3